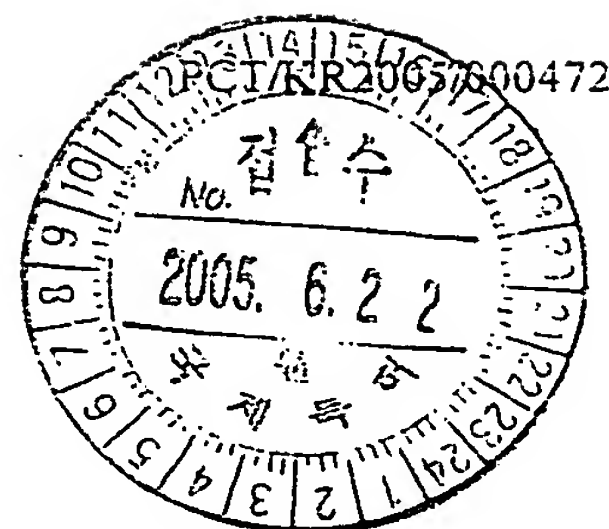


PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)



Applicant's or agent's file reference 5FPO-02-03	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/KR2005/000472	International filing date (day/month/year) 22 FEBRUARY 2005 (22.02.2005)	(Earliest) Priority Date (day/month/year) 03 MARCH 2004 (03.03.2004)
Applicant KOREA RESEARCH INSTITUTE OF BIOSCIENCE AND BIOTECHNOLOGY et al		

This International search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 3 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

1. **Basis of the report**

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box No. II)

3. ☒ **Unity of invention is lacking** (See Box No. III)

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the **drawings**,

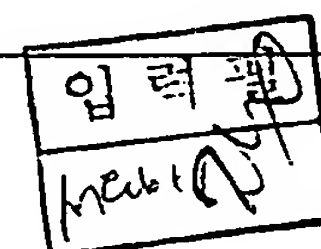
- a. the figure of the drawings to be published with the abstract is Figure No. _____

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

- b. ☐ none of the figure is to be published with the abstract.



INTERNATIONAL SEARCH REPORT

International application No.

PCT/KR2005/000472

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

The present application contains 2 different inventions not being linked by a single invention concept; A composition containing *Torreya nucifera* extracts and an abietane diterpenoid compound.

- i) Claim 1 relates to an abietane diterpenoid compound
- ii) Claims 2-5 relate to a composition for the prevention and the treatment fo cardiovascular disease containing *T. nucifera* extracts as an effective ingredient. Claim 2, as an independent claim, does not refer to the abietane diterpenoid compound directly and is considered not to represent any special technical feature compared with claim 1.

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☒ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR2005/000472

A. CLASSIFICATION OF SUBJECT MATTER

IPC7 C07C 39/17

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7 C07C 39/17

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

e-KIPASS, STN

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	Tetrahedron, Vol.58(7), 2002, pp.1262-1270, Jin-Wei Yang et al. "Biosynthesis of abietane diterpenoids in cultured cells of <i>Torreya nucifera</i> var. <i>radicans</i> " see the abstract and introduction	1 - 8
A	Phytochemistry, Vol.59(4), 2002, pp.385-389, Yutaka Orihara et al. "Abietane diterpenoids from suspension cultured cells of <i>Torreya nucifera</i> var. <i>radicans</i> " see the abstract and the figures	1 - 8
A	CN 1395921 A(Yi Yanghua et al.) 12 FUB. 2003 see abstract	1 - 2
A	Phytochemistry, Vol.26(4), 1987, pp.1211-1212, Harrison Leslie J. et al. " 18-Oxoferruginol from the leaf of <i>Torreya nucifera</i> " see abstract	1 - 2
A	JP 46031218 A(Murayama Shin et al.) 10 SEP. 1971 see the abstract	2 - 4



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search

20 JUNE 2005 (20.06.2005)

Date of mailing of the international search report

21 JUNE 2005 (21.06.2005)

Name and mailing address of the ISA/KR

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